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Anti-Cytokeratin 15 Antibody

Catalog # AP95916

Product Information

Application	WB, IHC, FC
Primary Accession	P19012
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	49212

Additional Information

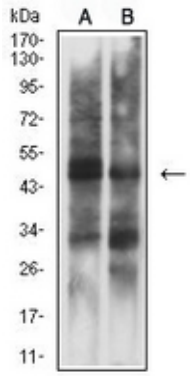
Gene ID	3866
Other Names	KRTB; Keratin, type I cytoskeletal 15; Cytokeratin-15; CK-15; Keratin-15; K15
Target/Specificity	Recombinant fusion protein of human Cytokeratin 15 expressed in E. Coli
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 FC~~FC (1/100 - 1/200)
Format	Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

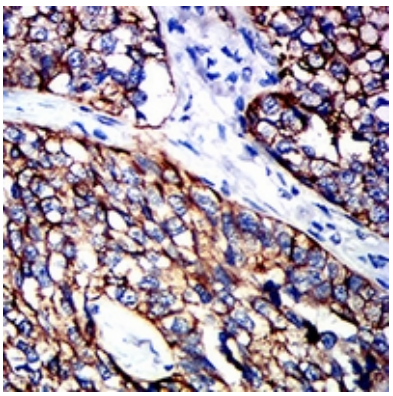
Name	KRT15 (HGNC:6421)
Synonyms	KRTB
Function	Structural component of intermediate filaments in the epithelium. Forms heteropolymers with type II keratin KRT5, assembling into keratin intermediate filament network that promotes mechanical resilience of undifferentiated cells, including hair follicle bulge cells, foregut basal progenitors and intestinal crypt cells. Displays an antagonist role with KRT14 in basal epithelial cells, where KRT14 promotes cell differentiation while KRT15 maintains the progenitor state and promotes proliferation and clonogenicity (PubMed:41511042). Promotes the progenitor state in basal keratinocytes by maintaining cytoplasmic YAP1 less effectively than KRT14 due to missing biochemical motifs, thereby allowing higher YAP1 nuclear activity (PubMed:41511042). Also contributes to epithelial cell regeneration after injury. In the absence of KRT14, forms a bona fide, but ultrastructurally distinct keratin filament network with KRT5 (By similarity).
Cellular Location	Cytoplasm {ECO:0000250|UniProtKB:Q61414}.

Tissue Location	Expressed in a discontinuous manner in the basal cell layer of adult skin epidermis, but continuously in the basal layer of fetal skin epidermis and nail. Also expressed in the outer root sheath above the hair bulb in hair follicle (at protein level) Expressed homogeneously in all cell layers of the esophagus and exocervix, but detected in the basal cell layer only of oral mucosa, skin and in the basal plus the next two layers of the suprabasal epithelium of the palate. Expressed in basal cells on the airway surface and in the gland ducts in pulmonary bronchus (PubMed:36512409)

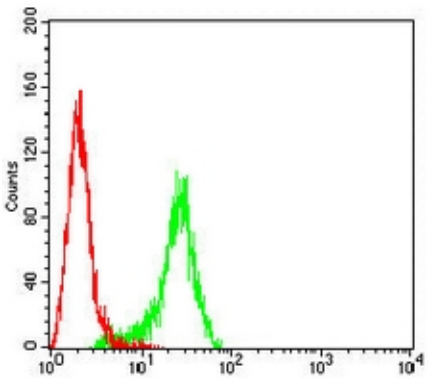
Images



Western blot analysis of Cytokeratin 15 expression in A431 (A), Hela (B) whole cell lysates. (Predicted band size: 49 kD; Observed band size: 49 kD)



Immunohistochemical analysis of Cytokeratin 15 staining in human bladder cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Flow cytometric analysis of PC3 cells using Anti-Cytokeratin 15 Antibody (green) and negative control (red).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.